REMARKS

The Office Action mailed October 16, 2008, has been received and reviewed. Each of claims 1-6, 8, 11-18, 20, 22-30, 32-44, and 46-49 was rejected. Claim 1 has been amended herein. Claims 25-30 and 32-36 have been canceled. Accordingly, claims 1-6, 8, 11-18, 20, 22-24, 37-44, and 46-49 remain pending. Care has been exercised to introduce no new subject matter. Reconsideration of the above-identified application in view of the above amendments and the following remarks is respectfully requested.

Rejections based on 35 U.S.C. § 112

Claims 1-6, 8, 11-18, 20, 22-30, 32-34 and 46-49 were rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The Office indicates that the claims contain subject matter that is not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventors, at the time the application was filed, had possession of the claimed invention. Specifically, the Office asserts that the limitation " . . . the dispatcher module manages the transmission of one or more message objects at a message object level without small scale flow control at the transport layer" is not supported by the specification. The Office further asserts that the Specification does not explain management of the message transmission at an object level or management involving small-scale flow control.

In contrast to the Office's assertions, the challenged limitation is explicitly recited and explained in paragraphs [0019]-[0023] of the as-filed specification. Paragraph [0023] teaches "message-based protocols (e.g., the message-object layer) govern flow control at a higher level, TCP datagrams may flow without small-scale flow control . . . ." Paragraph [0021] teaches that relying upon the message object as the fundamental unit of data transfer means there

is no need for "processing individual pieces of data as in pure TCP transmission modes." Managing the transmission of data at the message object layer reduces the stop and go effect from processing the individual pieces of data at the transport layer (e.g, TCP layer). Further, management of the transmission at the message level is explained in more detail in paragraph [0023] where, for example, a message is not released to the output queue until a message is received indicating the whole message unit previously sent to the queue has been processed.

Thus, Applicant asserts that the challenged claim limitation finds explicit support in the specification. Further, the explanation provided in the specification for how the transmission of data is managed at the message object layer without small-scale flow control is sufficient to demonstrate that Applicant had possession of the claimed invention at the time the specification was filed. The cancelation of claims 25-30 and 32-36 renders moot the rejection of those claims. Accordingly, Applicant respectfully requests withdrawal of the 35 U.S.C. 112, first paragraph rejection of claims 1-6, 8, 11-18, 20, 22-24, and 46-49.

Rejections based on 35 U.S.C. § 102

A. Applicable Authority.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdeggal Brothers v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the . . . claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 2 USPQ 2d 1913, 1920 (Fed. Cir. 1989). *See also*, MPEP § 2131.

B. Claims 13-18, 20, 22-30, 32-44 and 46-49 are not anticipated by US Patent No. 6,875,053.

Claims 13-18, 20, 22-30, 32-44 and 46-49 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,875,053 to Bolik (hereinafter the "Bolik reference"). The cancelation of claims 25-30 and 32-36 renders moot the rejection of those claims. As the Bolik reference does not describe, either expressly or inherently, each and every element of the rejected claims, Applicant respectfully traverses the rejection of claims 13-18, 20, 22-24, 37-44 and 46-49 as hereinafter set forth.

Claim 13, as amended, recites both "buffering the plurality of message objects in an output message queue prior to transmission to the remote destination" and "the remote destination includ[ing] an input message queue for buffering the plurality of message objects" (emphasis added). The Office concedes, with reference to claim 1, that the Bolik reference does not describe an input queue for buffering messages. *See* Office Action dated 10/16/2008, p.8. Thus, an input message queue is not described by the Bolik reference.

Also, the Bolik reference does not describe "associating each of the data sources with at least one corresponding session," as recited in claim 13. The Office indicates that this feature is described in col.6, ll. 3-34 of the Bolik reference. However, this section does not describe sessions or associating data sources with sessions. The Bolik reference describes assigning backup objects to a group ID. The group ID is used to organize backup objects in the backup database. *See* Bolik col. 6, ll. 1-45. Neither a session, nor a associating a session with a data source is described in the Bolik reference. Thus, the Bolik reference does not describe associating each of the data sources with at least one corresponding session.

Further, the Bolik reference does not describe managing the transmission of message objects at a message-object layer without small-scale flow control at the transport layer, as recited in claim 13. The Bolik reference does not describe how the backup transmission is managed. The Bolik reference focuses on keeping track of the backup documents once they are transferred to the backup storage. The backup objects are organized in the backup database according to groups of backup objects, but this is not related to the transmission of the object to the backup storage. The Bolik reference does not teach that small-scale flow control is avoided during transmission by storing the backup objects in groups.

Additionally, the Bolik reference does not describe "transforming the data into a plurality of message objects" as recited in claim 13. The Bolik reference receives the data as backup objects (e.g., files) and stores the backup objects in the same form. *See* Bolik reference col. 6, lines 3-15. No transformation is described in the Bolik reference. Thus, the Bolik reference does not describe "transforming the data into a plurality of message objects."

Accordingly, as the Bolik reference fails to describe, either expressly or inherently, every element of independent claim 13, Applicant respectfully submits that the Bolik reference does not anticipate claim 13. Claims 14-18, 20, and 22-24 depend, either directly or indirectly, on allowable claim 13. Accordingly, Applicant respectfully requests withdrawal of the 35 U.S.C. § 102 rejection of claims 13-18, 20, and 22-24.

Claim 37, recites "associating each of the data sources with at least one corresponding session." As described previously with reference to claim 13, the Bolik reference does not describe associating each of the data sources with at least one corresponding session. Also for reasons given with reference to claim 13, the Bolik reference does not describe "managing the transmission of the one or more message objects at a message object level

without small-scale flow control at the transport layer" or "transforming the data to one or more message objects in a communication engine." Accordingly, as the Bolik reference fails to describe, either expressly or inherently, every element of independent claim 37, Applicant respectfully submits that the Bolik reference does not anticipate claim 37. Claims 38-44 and 46-49 depend, either directly or indirectly, on allowable claim 37. Accordingly, Applicant respectfully requests withdrawal of the 35 U.S.C. § 102 rejection of claims 37-44 and 46-49.

Rejections based on 35 U.S.C. § 103

A. Applicable Authority.

Title 35 U.S.C. § 103(a) declares, a patent shall not issue when "the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." The Supreme Court in *Graham v. John Deere* counseled that an obviousness determination is made by identifying: the scope and content of the prior art; the level of ordinary skill in the prior art; the differences between the claimed invention and prior art references; and secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1 (1966).

To support a finding of obviousness, the initial burden is on the Office to apply the framework outlined in *Graham* and to provide some "articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *KSR Int'l Co. v. Teleflex Inc.,* 127 S. Ct. 1727 at 1741, 82 USPQ2d at 1396 (quoting *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006) with approval)." *See also* MPEP § 2142. "[R]ejections on obviousness cannot be sustained with mere conclusory statements." *Id.* Thus, in order to establish a *prima facie* case of obviousness the Office must provide "a clear articulation of the reason(s)

why the claimed invention would have been obvious" based on factual findings made while conducting the *Graham* factual inquires. *See* MPEP § 2143. The Supreme Court in *KSR* noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit. *Id.*

B. Claims 1-6, 8 and 11-12 are not unpatentable over US Patent No. 6,875,053 in view of U.S. Patent No. 7,346,699.

Claims 1-6, 8 and 11-12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the Bolik reference in view of U.S. Patent No. 7,346,699 to Krause (hereafter "Krause"). As explained in more detail below, Applicant respectfully disagrees with the factual findings made by the Office regarding the differences between the claimed invention and prior art references. Accordingly, Applicants respectfully traverses the rejection, as hereinafter set forth.

Independent claim 1, recites a system for managing the transmission of data from at least one data source to a remote destination. The transmission of the data is managed at the message-object layer without small-scale flow control at the transport layer. The system includes an input interface that receives data from at least one data source and a communication engine that encapsulates the data into one or more message objects, buffers the message objects prior to transmission, and facilitates transmission to a remote destination. The system provides for buffering the message objects at both ends of the transmission. Further, the system binds more than one session to a connection. The Bolik reference, on the other hand, describes a system for keeping track of backed up data. *See* Bolik reference Abstract. The Bolik reference tangentially discusses transferring data into the backup system. As described above with reference to claim 13, the Bolik reference fails to describe almost every feature of claim 1. The Krause reference transmits large amounts of data to multiple destinations during a multicast. *See*

Krause reference Abstract. Krause also fails to describe several of the same elements of claim 1 that the Bolik reference fails to describe.

Specifically, the combination of references does not describe managing the transmission of data at a message-object layer without small-scale flow control at the transport layer. The Krause reference describes managing the transmission of data by units of work. Units of work are the data packets that are actually transmitted. *See* Krause reference col. 11, ll. 20-35. Thus, the Krause reference teaches managing flow control at the transport layer. The Bolik reference does not describe how the backup transmission is managed. The Bolik reference focuses on keeping track of the backup documents. As described previously, the Bolik reference indicates that the backup objects are organized into groups. The organization of the backup objects into groups does not teach managing the transmission at the message-object layer without small-scale flow control.

In addition, the combination of references does not describe "the one or more message objects are buffered in an output message queue prior to transmission to the remote destination" and "wherein the one or more message objects are transmitted through the one or more connections to a remote destination including an input message queue for buffering the one or more message objects" (emphasis added). Thus, buffering occurs in both an output queue on the sending side (pre-transmission) and an input message queue at the remote destination. Further, the buffering is occurring at the message-object layer rather than the transport layer as in the Krause reference. Buffering message objects in both output and input queues helps to facilitate the accommodation of slow links and varying characteristics of traffic both on the sender and receiver sides, while driving data transport to the greatest possible utilization. *See* paragraph [0020] in the as-filed application.

The Bolik reference describes a transaction log at the remote destination to which backup objects may be written and then committed to the backup storage. *See* Bolik reference col. 6, ll. 30-37. Applicant respectfully asserts that the transaction log is not an output message queue that buffers message objects. The transaction log receives backup objects, rather than message objects, thus it does not buffer message objects. Further, there is no indication that the transaction log performs a buffering function. Rather, the transaction log tracks the storage of message objects in the backup database, and may hold a backup object until it is ready to be written into the backup database. *See* Bolik reference col. 6, ll. 1-45. Accordingly, the Bolik reference fails to describe either the "buffering in an output message queue" or "a remote destination including an input message queue." The Krause reference describes buffering on the transmission side, but not the destination side. The Krause reference also describes buffering at the data transport layer and not a message-object layer. *See* Krause at col. 20, ll. 59-62 (buffering units of work). Thus, neither the "one or more message objects are buffered in an output message queue prior to transmission to the remote destination" nor "wherein the one or more message objects are transmitted through the one or more connections to a remote destination including an input message queue for buffering the one or more message objects" (emphasis added) is described by the combination of references.

Further, the combination of references does not describe binding multiple sessions to a single connection, as describe in claim 1. The Bolik reference does not describe how the backup transmission is managed or how many sessions are bound to a connection. The Bolik reference focuses on keeping track of the backup documents once they are transferred to the backup storage. The backup objects are organized in the backup database according to groups of backup objects, but this is not related to the transmission of the object to the backup storage.

Similarly, the Krause reference describes broadcasting a multicast over a connection, but does not describe binding more than one session to a single connection. *See* Krause reference col. 20, ll. 47-55.

Thus, Applicant respectfully suggests that the Office has not carried its burden of establishing a *prima facie* case of obviousness because the differences between claim 1 and the cited references are significant. Further, claims 2-6, 8 and 11-12 are allowable, at least by virtue of their dependency on claim 1. Accordingly, Applicant respectfully requests the withdrawal of the 35 U.S.C § 103(a) rejection of claims 1-6, 8 and 11-12.

CONCLUSION

For at least the reasons stated above, claims 1-6, 8, 11-18, 20, 22-24, 37-44, and 46-49 are now in condition for allowance. Applicant respectfully requests withdrawal of the pending rejections and allowance of the claims. If any issues remain that would prevent issuance of this application, the Examiner is urged to contact the undersigned – 816-474-6550 or johoward@shb.com (such communication via email is herein expressly granted) – to resolve the same.

The fee for an RCE and a three-month extension of time is submitted herewith. It is believed that no additional fee is due in conjunction with this filing. However, if this belief is in error, the Commissioner is hereby authorized to charge any amount required to Deposit Account No. 19-2112.

Respectfully submitted,

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